

WHAT IS CLAIMED IS:

- 1 1. A color image forming apparatus, comprising:
  - 2 a plurality of image carriers for at least one color;
  - 3 a plurality of developing devices, each developing a toner image onto
  - 4 each image carrier;
  - 5 a plurality of charging devices, each charging the each image carrier;
  - 6 a first power source, connected to the developing devices in common;
  - 7 a second power source, connected to the charging devices in
  - 8 common; and
  - 9 a controller, changing a process control of at least one of the charging
  - 10 devices and the developing devices in accordance with a color image forming
  - 11 operation and a monochrome image forming operation.
- 1 2. The color image forming apparatus as set forth in claim 1, wherein the
- 2 first power source includes a variable voltage DC power source and a variable
- 3 frequency AC power source.
- 1 3. The color image forming apparatus as set forth in claim 1, wherein the
- 2 second power source includes a variable voltage DC power source and a
- 3 variable voltage AC power source.
- 1 4. The color image forming apparatus as set forth in claim 1, wherein
- 2 each charging device includes either a roller charging mechanism or a brush
- 3 charging mechanism; and

4                   wherein each developing device includes either a contact developing  
5                   mechanism or a non-contact developing mechanism.

1               5.       The color image forming apparatus as set forth in claim 1, wherein  
2                   each charging device includes a roller charging mechanism; and  
3                   wherein each developing device includes a contact developing  
4                   mechanism.

1               6.       The color image forming apparatus as set forth in claim 1, wherein  
2                   each charging device includes a brush charging mechanism; and  
3                   wherein each developing device includes a non-contact developing  
4                   mechanism.

1               7.       The color image forming apparatus as set forth in claim 1, wherein the  
2                   process control includes at least one of a control of a charging bias voltage for  
3                   applying the charging devices and a control of a developing bias voltage for  
4                   applying the developing devices.

1               8.       The color image forming apparatus as set forth in claim 7, wherein the  
2                   charging bias voltage includes either a DC voltage to be singly applied or an  
3                   alternating voltage superposed with the DC voltage.

1               9.       The color image forming apparatus as set forth in claim 7, wherein the  
2                   developing bias voltage includes either a DC voltage to be singly applied or an  
3                   alternating voltage superposed with the DC voltage.

1       10.     The color image forming apparatus as set forth in claim 7, wherein the  
2     controller changes the control of the charging bias voltage so as to set a  
3     voltage in the monochrome image forming operation higher than a voltage in  
4     the color image forming operation.

1       11.     The color image forming apparatus as set forth in claim 7, wherein the  
2     controller changes the control of the developing bias voltage so as to set a  
3     frequency of an alternating voltage in the monochrome image forming  
4     operation higher than a frequency of an alternating voltage in the color  
5     monochrome image forming operation.